

Title (en)

A monolithic semiconductor device and associated manufacturing process

Title (de)

Monolithische Halbleiteranordnung und entsprechendes Herstellungsverfahren

Title (fr)

Dispositif semi-conducteur monolithique et son procédé de fabrication

Publication

**EP 0459578 B1 19970122 (EN)**

Application

**EP 91201245 A 19910525**

Priority

IT 661090 A 19900531

Abstract (en)

[origin: EP0459578A2] By using a diffused insulation region placed around the body region and with deeper junction and hence longer curvature radius than the typical body/drain junction values, in combination with an appropriate layout of the buried drain region underneath the power stage, breakdown voltage is maximized without compromising the Ron series resistance of the power stage and the reliability of the device. <IMAGE>

IPC 1-7

**H01L 27/06**; **H01L 29/772**; **H01L 29/06**

IPC 8 full level

**H01L 21/76** (2006.01); **H01L 27/06** (2006.01); **H01L 27/088** (2006.01); **H01L 21/8249** (2006.01); **H01L 29/78** (2006.01)

CPC (source: EP US)

**H01L 27/0623** (2013.01 - EP US)

Citation (examination)

EP 0453026 A2 19911023 - CONS RIC MICROELETTRONICA [IT]

Cited by

US5324670A; EP0870322A4; EP0476815B1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**EP 0459578 A2 19911204**; **EP 0459578 A3 19920708**; **EP 0459578 B1 19970122**; DE 69124289 D1 19970306; DE 69124289 T2 19970619; IT 1244239 B 19940708; IT 9006610 A0 19900531; IT 9006610 A1 19911201; JP 3002016 B2 20000124; JP H0653510 A 19940225; US 5317182 A 19940531

DOCDB simple family (application)

**EP 91201245 A 19910525**; DE 69124289 T 19910525; IT 661090 A 19900531; JP 15092991 A 19910528; US 70675191 A 19910529